

U.S. Patent Application No.: 09/926,446
Response Under 37 C.F.R. §1.111 dated August 3, 2004
Response to the Office Action dated May 5, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A programmable controller comprising a speed pattern generator including a plurality of speed pattern generator units that respectively receive input of ~~all of the~~ an amount of movement, speed, ~~acceleration, time~~ acceleration time and deceleration time and calculate a desired speed pattern for output to a servomotor, wherein

said speed pattern generator ~~includes a plurality of said speed pattern generator units to generate~~ generates a desired speed pattern by ~~operating, either one of said arbitrary speed pattern generator units solely or~~ operating a speed pattern generator unit of said plurality of ~~arbitrary speed~~ speed pattern generator units ~~simultaneously~~.

Claim 2 (Original): A programmable controller as set forth in Claim 1, wherein

the programmable controller comprises a user operation portion, the speed pattern generator outputs the calculated speed pattern to said user operation portion, and an output is sent from said user operation portion to the servomotor.

U.S. Patent Application No.: 09/926,446
Response Under 37 C.F.R. §1.111 dated August 3, 2004
Response to the Office Action dated May 5, 2004

Claim 3 (Currently Amended): A programmable controller as set forth in Claim 2, wherein

the user operation portion can be started and stopped by a user at ~~free timing~~.

Claim 4 (Original): A programmable controller as set forth in Claim 1, wherein the speed pattern generator units store trapezoidal waveforms having arbitrary shapes and a desired speed pattern is generated as a composite pattern that is geometrically superposed based on the algebraic sum of these trapezoidal waveforms.

Claim 5 (New): A programmable controller as set forth in Claim 1, wherein the desired speed pattern is generated by simultaneously operating plural speed pattern generator units of said plurality of speed pattern generator units.

Claim 6 (New): A programmable controller as set forth in Claim 1, wherein the plurality of speed pattern generator units respectively generate arbitrary speed patterns.

Claim 7 (New): A programmable controller as set forth in Claim 2, wherein the user operation portion allows a user to monitor a waveform representing the calculated speed pattern.